

REMARKS

Applicant wishes to thank the Examiner for the attention accorded to the instant application, and respectfully requests reconsideration of the application as amended.

Formal Matters

In this Response, claims 23, 24, 26-36, 41, 42 and 47-49 are pending; claims 23, 27-32, and 47 are amended. Claim 50 is canceled, and claims 1-19, 21-22, 25, 37-40 and 43-46 have previously been canceled. Claim 20 has previously been withdrawn. Claims 27-32 are amended to correct antecedent basis. Claims 23, 29, 32 and 47 are also amended to more clearly recite the invention. Support for the amendment to claim 29 can be found in the specification on page 42, lines 4-10, and support for claim 32 can be found in the specification on page 30, lines 20-23. Support for the amendments to claims 23 and 47 can be found in the specification on page 22, lines 17-20. Care has been taken to ensure no new matter is being entered.

Applicant appreciates that the Examiner has reviewed and considered the references cited in the Information Disclosure Statement (IDS) filed on February 24, 2004 with the application and on March 18, 2004, as well as the IDS filed January 11, 2006, and the IDS filed April 24, 2006.

Specification

The Examiner found that the title of the invention is not descriptive. Applicant submits a new title that is clearly indicative of the invention to which the claims are directed.

Rejection of Claims Under 35 U.S.C. §112

Claims 27, 29, 30, 31, 32, 34, and 50 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. As discussed above, claims 27 and 29-32 are amended to distinctly claim the subject matter regarded as the invention and to correct antecedent basis errors. Applicant respectfully submits that claim 34 is not indefinite, and thus is not amended herein. Claim 50 is canceled. Withdrawal of this rejection is respectfully requested.

Rejection of Claims Under 35 U.S.C. §102

Claims 23, 24, 26-31, 34, 36, 41, 42 and 47-50 are rejected under 35 U.S.C. § 102(b) as anticipated by Miller, U.S. Patent No. 6,081,884. This rejection should be withdrawn based on the comments and remarks herein.

Miller teaches the advantage of allowing x86 instructions to execute in parallel with RISC instructions (column 11, lines 25-28, emphasis added). Miller discloses an instruction alignment unit that sends the instructions to be executed by RISC instruction units 30A-C or by RISC/x86 instruction units 30D-E. To perform arithmetic operations, each instruction unit 30A-E sends instructions to its associated functional unit 22A-C and 24A-B. Each functional unit is connected to only one instruction execution unit 30A-E (see Figure 3), so that, for example, the RISC Functional Unit 22A executes on RISC instruction, and the x86/Simple RISC Functional Unit 24B executes on x86 and RISC instructions. More specifically, the central windows 20 do not execute a RISC instruction by using both the RISC Functional Unit 22A and the X86/Simple RISC Functional Unit 24B. Hence, Miller does not teach “the first execution controller executes the first decoded result by using both the first arithmetic unit and the shared arithmetic unit”, as recited in independent claims 23 and 47.

It has been held by the courts that “Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the

claim.” *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). As illustrated above, Miller does not teach the first execution controller executes the first decoded result by using both the first arithmetic unit and the shared arithmetic unit, as recited in independent claims 23 and 47. Consequently, these independent claims are not anticipated by the art of record in the application. Claims 24, 26-31, 34, 36, 41, and 42 depend from claim 23, and claims 48 and 49 depend from claim 47, each dependent claim incorporating all of the features and limitations of its base claim. Thus, these dependent claims are not anticipated by the art of record in the application for at least the reasons that their base claims are not anticipated by the art of record in the application. Withdrawal of this rejection is respectfully requested.

Rejection of Claims Under 35 U.S.C. §103

Claims 32, 33 and 35 are rejected under 35 U.S.C. § 103(a) as unpatentable over Miller in view of Trivedi, et al., U.S. Patent No. 6,430,674 (hereinafter “Trivedi”). Applicant respectfully traverses the rejection since even presuming *arguendo* that it would have been obvious to combine the references as urged by the Examiner, the combined teachings of the references would not result in that which is claimed.

As discussed above, Miller does not teach or suggest a first execution controller executes the first decoded result by using both the first arithmetic unit and the shared arithmetic unit. Trivedi does not overcome this deficiency, and the Examiner does not state otherwise. Trivedi discloses a method and apparatus for speeding the transition from one instruction set mode to another. Trivedi does not teach or suggest executing an instruction, or decoded result, using both a first arithmetic unit and a shared arithmetic unit.

It has been held by the courts that to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See, *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As illustrated above, the hypothetical combination of Miller and Trivedi lacks a first controller that executes the first decoded result by using both the first arithmetic unit and the shared arithmetic unit, and does not disclose or suggest each and every feature of the present invention as recited in independent claim 23. Thus *prima facie* obviousness has not been established. Accordingly, claim 23 is distinguishable over the art of record in the application. Claims 32, 33, and 35 depend from claim 23, each dependent claim incorporating all of the features and limitations of the base claim. Hence, these dependent claims are patentably distinguishable over the art of record in the application for at least the reasons that claim 23 is patentably distinguishable over the art of record in the application. Accordingly, withdrawal of this rejection is requested.

Conclusion

For at least the reasons set forth in the foregoing discussion, Applicant believes that the Application is now allowable, and respectfully requests that the Examiner reconsider the rejection and allow the Application. Should the Examiner have any questions regarding this Amendment, or regarding the Application generally, the Examiner is invited to telephone the undersigned attorney.

Respectfully submitted,



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